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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,944

12/15/2005

Dieter Kress

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EXAMINER

CADUGAN, ERICA E

ART UNIT

PAPER NUMBER

3722

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/560,944

Applicant(s)

KRESS ET AL.

Examiner

Erica E. Cadugan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>20070201</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/30/06, 12/15/05</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. It is noted that the Examiner proposed an Examiner's Amendment (on December 4, 2006) as set forth in the attached Interview Summary. Examiner recommends viewing the proposed amendment for details on how the objections to the specification and the rejections of the claims under 35 USC 112, second paragraph, can be overcome.

Specification

2. The disclosure is objected to because of the following informalities: the disclosure on pages 1-2 refers to the claims by number. Applicant is required to amend the specification to remove these references and to incorporate into the disclosure any subject matter of these claims that is necessary to the understanding of the invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-13 are replete with instances that do not particularly point out and distinctly claim the subject matter of applicant's invention. Examples of these instances are listed below, but these instances are not limited to the listed examples. Applicant is advised to closely review the claims for other occurrences.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim

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does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "a tool system" in line 1, and the claim also recites "especially of a metal-cutting tool" (in line 8) which is the narrower statement of the range/limitation.

There are several instances where an indefinite article such as "a" or "an" is used to modify a previously-described limitation, rendering it unclear whether the limitation is the same limitation to which the claim previously referred. For example, in claim 2, line 2, it is unclear as set forth in the claim whether "a first clamping surface" is the same as or different from the "first clamping surface" already set forth in claim 1. If so, Examiner suggests changing "a first clamping surface" in claim 2, line 2, to --the first clamping surface-- or --said first clamping surface-- for clarity. Similar situations occur throughout the claims. Examples of these are set forth below, but note that this is not meant to be an all-inclusive list of such occurrences, and that Applicant is required to review the claims for further such similar occurrences: "a second clamping surface" in claim 7.

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There are several positively recited limitations that lack sufficient antecedent bases in the claims. A few examples of this are: "the pull stud" in at least claim 2, line 1, claim 3, line 1, claim 4, line 3, claim 5, line 2, claim 6, line 2, etc.; "the eccentric cam" in at least claim 2, line 3, claim 7, line 2, claim 8, line 2, claim 9, line 2, claim 10, line 2, claim 11, line 2, claim 12, line 2, claim 13, line 2, etc.; "the tool head" in at least claim 5, line 2; "the center axis of the ... tool" in claim 3, noting that the first occurrence of "center axis" in line 2 of claim 3 is not of the tool, but is instead of the pull stud; "the metalworking tool" in at least claims 3 and 9; "the extension" in claim 5, line 2; "the boss" in at least claim 8; "the ejector surface" in at least claim 11; "the interior surface" in claim 11; "the cavity" in claim 11. This is not meant to be an all-inclusive list of such occurrences. Applicant is required to review the claims and correct any other such occurrences of limitations lacking sufficient antecedent basis.

As set forth in claim 1, line 18, it is unclear as claimed what the distance between the second clamping surface to a rotary axis of the eccentric element is "different" from, i.e., different from or than what? Examiner suggests changing "is different" to --varies--.

As set forth in claim 2, it is unclear to what item or object "which" refers, i.e., whether "which" refers to "the pull stud", the "boss", the "first clamping surface", etc. If, as it appears, it refers to the "boss", Examiner suggests inserting a comma after "first clamping surface" and inserting "boss" after "which".

It is noted that claim 7 sets forth that the spacing of a second clamping surface to an axis of rotation of the eccentric cam (element) "varies". Note that if Applicant corrects claim 1 as suggested above to change "different" to --varies--, or in some other way with different further

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claim language clarifies that “different” in claim 1 meant “varies”, this limitation of claim 7 would already be found in claim 1.

In claim 9, it is unclear what is meant by “essentially perpendicular on”. Examiner suggests changing “on” in this phrase to --to-- for clarity.

As presently set forth in claim 10, it is unclear as claimed to what “the side” refers, i.e., accessible from the side of what?

As set forth in claim 10, it is unclear as claimed what item or structure “includes an acute angle”, i.e., what “includes” an acute angle? It is also unclear as claimed in claim 10 to what the axis of rotation belongs, i.e., the axis of rotation of what?

As set forth in claim 11, it is unclear as claimed to what the interior surface and the cavity belong, i.e., the interior surface of what, the cavity of what?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,723,878 to Kelm et al.

Note that Kelm teaches a machining tool 16 (col. 1, lines 10-36 and col. 2, lines 35-39, as well as Figure 1) to be clamped within a “retainer” 14. The “exchangeable tool head” 16 has an “appendix” in the form of a “tension-bolt” or “pull stud” 36 (see Figure 1) that is inserted into a recess within the “retainer” 14 (see Figure 1). The clamping of the exchangeable tool head 16

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is achieved via the use of a rotary “eccentric cam element” 10 having a slot 24 having a clamping surface, the distance of which from the center rotational axis 20 of the eccentric cam element 10 varies (see Figure 2, for example). Note that the clamping surface (at 38) of the eccentric cam element 10 is concave, and engages a corresponding convex “first” clamping surface 46 of a “boss” of the pull stud (see Figures 1, 2, and col. 4, lines 40-59, for example, especially lines 57-59).

In operation, the pull stud of the exchangeable tool is inserted into slot 24 of the eccentric cam element 10, and an appropriate tool is inserted into the rotating means or “operating surfaces” (re claim 13) 60 to thereby rotate the eccentric cam element, thereby causing the aforescribed clamping surfaces of the eccentric cam element 10 and the pull stud to come into clamping contact (Figures 1, 2, col. 4, lines 37-59).

Re various dependent claims not already covered by the above description:

Re claim 4, see Figure 1, noting the angle alpha of the surface 45 relative to the generally horizontal axis of the pull stud 36.

Re claim 5, see Figure 1.

Re claim 6, see shoulder element 42, Figure 1.

Re the ejector surface of claim 8, see col. 4, line 60 through col. 5, line 2.

Re claim 9, see Figure 1.

Re claim 10, note that the second clamping surface at 38 is described as a tapered wall (see col. 2, lines 50-59), and, as shown in Figures 1-2, would extend at an “acute angle” within a hollow space of the cam element 10 relative to the rotation axis 20.

Re claim 11, see Figures 1-2 and col. 4, line 60 through col. 5, line 2.

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Specifically regarding claim 12 as presently set forth (noting that the proposed Examiner's Amendment utilized slightly different wording), note that the top and bottom grooves 54 of the eccentric cam element 10, the O-rings received in those grooves, the groove 56, bore 58, and a spring loaded set screw received in the bore 58, all, at least to some degree and in some manner, serve to "restrict" the "rotational movement" of the eccentric cam element 10 (see Figure 1 and col. 4, lines 4-17, for example).

(However, re the proposed changes to claim 1 in the proposed Examiner's Amendment, it is noted that the eccentric cam element taught by Kelm does not include stops that "restrict an amount of rotational movement of the eccentric cam element therebetween".)

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

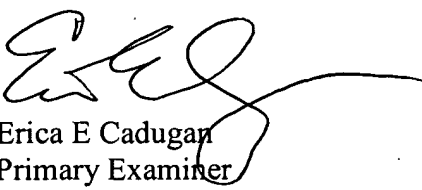
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Erica E Cadugan
Primary Examiner
Art Unit 3722

eec
February 1, 2007